

## CLAIMS

1. Hip prosthesis with a joint part (6) and an anchoring part (5) to be implanted in the neck (2) of the femur (1), characterized by the fact that the anchoring part (5) can be deformed in a manner that corresponds to load-induced deformations of the femur (1) in the area of the neck (2).

2. Hip prosthesis in accordance with Claim 1, characterized by the fact that the anchoring part (5) is designed as a stump that freely terminates distally in the bone tissue.

3. Hip prosthesis in accordance with Claim 1 or Claim 2, characterized by the fact that the anchoring part (5) is formed by several parts (9, 10) that can move relative to one another and are positively joined with one another in the direction perpendicular to the longitudinal axis (4) of the neck of the femur.

4. Hip prosthesis in accordance with Claim 3, characterized by the fact that the parts (9, 10) can be displaced and/or rotated relative to one another.

5. Hip prosthesis in accordance with Claim 3 or Claim 4, characterized by the fact that a first part (9) consists of an anchoring block (11) and a guide stem (12) that projects from the anchoring block (11) in the direction of the longitudinal axis (4) of the neck of the femur, and a second part (10) consists of a guide block (15) with a guide channel (16) that receives the guide stem (12).

6. Hip prosthesis in accordance with Claim 5, characterized by the fact that the guide channel (16a) is expanded relative to the guide stem (12a), and the second part (10) can be rotated relative to the first part (9) about an axis that is perpendicular to the longitudinal axis (4) of the neck of the femur.

7. Hip prosthesis in accordance with Claim 5 or Claim 6, characterized by the fact that projections (21, 22) located opposite each other are formed in the guide channel (16a), and that the first part can rotate on these projections like a rocker relative to the second part.

8. Hip prosthesis in accordance with any of Claims 5 to 7, characterized by the fact that the cross sections of the guide stem and guide channel are circular, and an annular projection

(25, 26) is formed in the channel.

9. Hip prosthesis in accordance with Claim 8,  
characterized by the fact that the opposing projections (21, 22)  
have rounded rolling surfaces (23), so that the projections (21,  
22) rest against the guide stem (12a) in each rotational  
position of the second part.

10. Hip prosthesis in accordance with any of Claims 1 to  
9, characterized by the fact that an annular recess (18), which  
can become filled by bone tissue growing into it, is formed  
between the anchoring blocks (11, 15) of the parts (9, 10).